

Item description

Female connector/socket **WINSTA®** MIDI with protection type IP20

Use effective pluggable connections instead of laborious screw connections: With the **WINSTA®** MIDI female connector/socket rated current 25 A. The pluggable installation connectors with spring pressure connection technology work without screw connections. They allow fast, efficient, error-free installation in numerous applications. The coding options reduce installation errors, allowing fast, maintenance-free wiring of all components. The pluggable installation connector is protected in accordance with protection type IP20 (When mated and secured with a strain relief housing: IP2xC (These compact connectors are not designed for use in open, easily accessible areas!)). That results in the fact that users' fingers will never come into contact with live elements. Solutions like the **WINSTA®** MIDI pluggable installation connectors with B coding are suitable for process control, such as for lighting or within data networks. Important parameters in the selection of a pluggable installation connector are the rated current and voltage: They tell us about the product's domains of use. This product has a current rating of 25 A – as a result it is also suitable for high power loads. The **WINSTA®** MIDI product line achieves total flexibility for the installation. Through its Push-in CAGE CLAMP® spring pressure connection technology, it guarantees time-saving, error-free installation and offers customization for meeting various installation requirements.

Lower costs through fast commissioning and elimination of service expenses – solutions from **WINSTA®** MIDI

The **WINSTA®** Pluggable Connection System allows pluggable electrical installation. This significantly reduces the need for servicing and lowers

Subject to changes. Please also observe the further product documentation!



costs. Now you can also lower installation costs without compromising quality and safety: with protection against mismatching eliminates the need for servicing and prevents unnecessary downtime.

-
- pluggable installation connectors with protection against mismatching
- simple circuits
- with B coding for use in process automation, such as lighting technology, for instance
- custom-engineered solutions
- convenient installation and commissioning

Data Notes

Variants:

Other pole markings

Other versions (or variants) can be requested from WAGO Sales or configured at <https://configurator.wago.com/>.

Electrical data

Ratings per IEC/EN

| Ratings per | IEC/EN 60664-1 |
|-------------------------------|---|
| Nominal voltage (III/3) | 400 V |
| Rated impulse voltage (III/3) | 6 kV |
| Rated current | 25 A |
| Legend (ratings) | (III / 3) ≙ Overvoltage category III / Pollution degree 3 |

Ratings per IEC/EN – Notes

| | |
|----------------------|---|
| Note (rated current) | 25 A for 3-pole load 20 A for 4- and 5-pole load |
|----------------------|---|

Ratings per UL 1977

| | |
|------------------------|--|
| Note for the US market | Some versions may also be used for current interruption in accordance with the UL certificate in select applications with currents below 16 A and voltages up to 600 V. For further information, please contact your local sales office. |
|------------------------|--|

| | |
|-------------------------|-------|
| Rated voltage (UL 1977) | 600 V |
| Rated current UL 1977 | 23 A |

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General information

Note on contact resistance

approx. 1 mΩ of contact resistance

approx. 0.25 mΩ contact transition plug/socket

Connection data

| | |
|----------------------------|----|
| Connection points | 10 |
| Total number of potentials | 5 |

Connection 1

| | |
|--|----------------------------------|
| Connection technology | Push-in CAGE CLAMP® |
| Actuation type | Operating tool Push-in |
| Nominal cross-section | 4 mm² / 12 AWG |
| Solid conductor | 0.5 ... 4 mm² / 20 ... 12 AWG |
| Solid conductor; push-in termination | 1.5 ... 4 mm² / 16 ... 12 AWG |
| Stranded conductor | 0.5 ... 2.5 mm² / 20 ... 14 AWG |
| Fine-stranded conductor | 0.5 ... 4 mm² / 20 ... 12 AWG |
| Fine-stranded conductor; with insulated ferrule | 0.25 ... 1.5 mm² / 20 ... 16 AWG |
| Fine-stranded conductor; with uninsulated ferrule | 0.25 ... 2.5 mm² / 20 ... 14 AWG |
| Fine-stranded conductor; with ferrule; push-in termination | 1.5 mm² / 16 AWG |
| Strip length | 9 mm / 0.35 inches |
| Pole number | 5 |
| Conductor entry direction to mating direction | 0° |

Physical data

| | |
|-------------|------------------------|
| Pin spacing | 10 mm / 0.394 inches |
| Width | 50 mm / 1.969 inches |
| Height | 12.9 mm / 0.508 inches |
| Depth | 37.5 mm / 1.476 inches |

Mechanical Data

| | |
|-----------------|--------------------|
| Application | Control technology |
| Coding | B |
| Variable coding | Yes |
| Marking | 1 2 3 4 5 |

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| | |
|---|---|
| Potential marking | 1 2 3 4 5 |
| Mating force of a plug-in connection | approx. 20 ... 70 N (depending on pole number) |
| Retention force of a plug-in connection | Locked: > 80 N |
| Unmating force of a plug-in connection | Unlocked: approx. 20 ... 70 N (depending on pole number) |
| Number of mating cycles | 200, without resistive load |
| Protection type | IP20; When mated and secured with a strain relief housing: IP2xC (These compact connectors are not designed for use in open, easily accessible areas!) |

Plug-in connection

| | |
|------------------------------------|--|
| Contact type (pluggable connector) | Female connector/socket |
| Connector (connection type) | for conductor |
| Mismating protection | Yes |
| Note on mismating protection | All <i>WINSTA</i> ® components are 100% protected against mismating when: a.) plugging different numbers of poles b.) plugging while rotated 180 c.) plugging while laterally staggered d.) plugging one pole |
| Locking lever | Can be retrofitted |
| Locking of plug-in connection | locking lever |
| Note on locking system | All connectors for mounted installations (snap-in versions for lighting fixtures or devices, all types of PCB and distribution connectors) are factory-equipped with locking levers to ensure plugs and sockets are securely locked. Additional locking levers are only required for flying leads (plug/socket). |

Material data

| | |
|-----------------------------|--|
| Note (material data) | Information on material specifications can be found here |
| Color | gray |
| Cover color | gray |
| Material group | I |
| Insulation material | Polyamide (PA66) |
| Flammability class per UL94 | V0 |
| Clamping spring material | Chrome-nickel spring steel (CrNi) |
| Contact material | Copper or copper alloy; surface-treated |
| Contact plating | Tin |
| Fire load | 0.407 MJ |

Subject to changes. Please also observe the further product documentation!



| | |
|--------|--------|
| Weight | 16.1 g |
|--------|--------|

Environmental requirements

| | |
|--|--|
| Processing temperature | -5 ... +40 °C |
| Continuous operating temperature | -35 ... +85 °C |
| Note on continuous operating temperature | Insulating parts for temperatures ≤ 105 °C |

Commercial data



| | |
|-----------------------|---------------|
| Product Group | 20 (Winsta) |
| eCl@ss 10.0 | 27-44-06-05 |
| eCl@ss 9.0 | 27-44-06-05 |
| ETIM 8.0 | EC002560 |
| ETIM 7.0 | EC002560 |
| PU (SPU) | 50 pcs |
| Packaging type | box |
| Country of origin | DE |
| GTIN | 4044918252454 |
| Customs tariff number | 85366990990 |

Environmental Product Compliance

| | |
|------------------------|-------------------------|
| RoHS Compliance Status | Compliant, No Exemption |
|------------------------|-------------------------|

Approvals / Certificates



General approvals

| Logo | Approval | Additional Approval Text | Certificate name |
|--|---|--------------------------|------------------|
| | CCA DEKRA Certification B.V. | IEC 61984 | NL-32104 |
|  | CCA DEKRA Certification B.V. | EN 61984 | 2173495.01 |
|  | cURus Underwriters Laboratories Inc. | UL 1977 | E45171 |
| | cURus Underwriters Laboratories Inc. | UL 1059 | E 45172 |




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Declarations of conformity and manufacturer's declarations

| Logo | Approval | Additional Approval Text | Certificate name |
|--|--|--------------------------|------------------|
|  | EU-Declaration of Conformity WAGO GmbH & Co. KG | - | - |
|  | UK-Declaration of Conformity WAGO GmbH & Co. KG | - | - |

Approvals for marine applications

| Logo | Approval | Additional Approval Text | Certificate name |
|---|--|--------------------------|------------------|
|  | ABS American Bureau of Shipping | - | 19-HG1868589-PDA |
|  | DNV GL Det Norske Veritas, Germanischer Lloyd | - | TAE00001Z6 |
|  | LR Lloyds Register | IEC 61984 | LR22429487TA |

Counterpart



Item no.770-1641

T-distribution connector; 5-pole; Cod. B; 1 input; 2 outputs; 2 locking levers; gray

www.wago.com/770-1641

Item no.770-1741

T-distribution connector; 5-pole; Cod. B; 1 input; 2 outputs; 3 locking levers; for flying leads; gray

www.wago.com/770-1741

Item no.770-255

Plug; 5-pole; Cod. B; 4,00 mm²; graywww.wago.com/770-255

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Item no. 770-1744
3-way distribution connector; 5-pole; Cod. B; 1 input; 3 outputs; gray

www.wago.com/770-1744



Item no. 770-755
Snap-in plug; 5-pole; Cod. B; 4,00 mm²; gray

www.wago.com/770-755



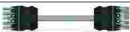
Item no. 770-855
Plug for PCBs; straight; 5-pole; Cod. B; gray

www.wago.com/770-855



Item no. 770-855/011-000
Plug for PCBs; angled; 5-pole; Cod. B; gray

www.wago.com/770-855/011-000



Item no. 771-9995/005-103
pre-assembled interconnecting cable; Eca; Socket/plug; 5-pole; Cod. B; (H)05VV-F 5x1,0 mm²; 1 m; 1,00 mm²; gray

www.wago.com/771-9995/005-103



Item no. 771-9995/205-103
pre-assembled connecting cable; Eca; Plug/open-ended; 5-pole; Cod. B; (H)05VV-F 5x1,0 mm²; 1 m; 1,00 mm²; gray

www.wago.com/771-9995/205-103

Required accessories

Locking levers

Locking system



Item no.: 770-121
Locking lever; for flying leads; for manual operation; white

www.wago.com/770-121



Item no.: 770-131
Locking lever; for flying leads; for tool operation; white

www.wago.com/770-131



Item no.: 770-101
Locking lever; for flying leads; for manual operation; black

www.wago.com/770-101



Item no.: 770-111
Locking lever; for flying leads; for tool operation; black

www.wago.com/770-111

Strain relief

Strain relief housing



Item no.: 770-505/021-000
Strain relief housing; 5-pole; for 1 cable; 11.5 ... 16.5 mm; 71 mm; black

www.wago.com/770-505/021-000



Item no.: 770-505/023-000
Strain relief housing; 5-pole; for 2 cables; 5.0 ... 9.0 mm; 55 mm; black

www.wago.com/770-505/023-000

Subject to changes. Please also observe the further product documentation!

**Item no.: 770-505**

Strain relief housing; 5-pole; for 2 cables; 9.0 ... 13.0 mm; 55 mm; black

www.wago.com/770-505**Item no.: 770-515**

Strain relief housing; 5-pole; for 2 cables; 9.0 ... 13.0 mm; 55 mm; white

www.wago.com/770-515**Item no.: 770-515/023-000**

Strain relief housing; 5-pole; for 2 cables; 5.0 ... 9.0 mm; 55 mm; white

www.wago.com/770-515/023-000**Item no.: 770-515/021-000**

Strain relief housing; 5-pole; for 1 cable; 11.5 ... 16.5 mm; 71 mm; white

www.wago.com/770-515/021-000

Optional accessories

Tool

Operating tool

**Item no.: 210-719**

Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

www.wago.com/210-719

Mounting

Mounting accessories

**Item no.: 770-320**

Snap-in frame; 5-pole; 1.0 ... 3.0 mm; black

www.wago.com/770-320**Item no.: 770-321**

Snap-in frame; 5-pole; 0.5 ... 2.0 mm; black

www.wago.com/770-321**Item no.: 770-340**

Snap-in frame; 5-pole; 1.0 ... 3.0 mm; white

www.wago.com/770-340**Item no.: 770-341**

Snap-in frame; 5-pole; 0.5 ... 2.0 mm; white

www.wago.com/770-341

Cover

Cover

**Item no.: 770-201**

Lockout cap; 12-pole, separable; for sockets; Plastic; black

www.wago.com/770-201**Item no.: 770-221**

Lockout cap; 12-pole, separable; for sockets; Plastic; white

www.wago.com/770-221

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Item no.: 897-2005

Protective cap; Type4; for sockets and plugs; PVC; red

www.wago.com/897-2005**Marking accessories****Marker**

Item no.: 770-450/000-002
Marker card; Plastic; yellow

www.wago.com/770-450/000-002



Item no.: 770-450/000-001
Marker card; Plastic; green

www.wago.com/770-450/000-001



Item no.: 770-450/000-005
Marker card; Plastic; red

www.wago.com/770-450/000-005



Item no.: 770-450
Marker card; Plastic; white

www.wago.com/770-450



Item no.: 770-450/000-006
Marker card; Plastic; blue

www.wago.com/770-450/000-006



Item no.: 770-450/000-012
Marker card; Plastic; orange

www.wago.com/770-450/000-012

Downloads**Documentation****Bid Text**

| | | | |
|------------------------|-------------|----------------|----------|
| 770-245 X81 - Datei | 2019 Feb 19 | xml 3.0 kB | Download |
| 770-245 doc - Datei | 2015 Jun 8 | doc 24.6 kB | Download |

CAD/CAE-Data**CAD data**

| | | |
|----------------------|-----|----------|
| 2D/3D Models 770-245 | URL | Download |
|----------------------|-----|----------|

CAE data

FPI AN Data Portal 770-245

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|------------------------------------|---------------------|--------------------------|
| ET-Link Data Sheet 770-245 | URL | Download |
| WSCAD Universe 770-245 | URL | Download |
| ZUKEN Portal 770-245 | URL | Download |
| Asset Administration Shell | | |
| Asset Administration Shell 770-245 | URL | Download |

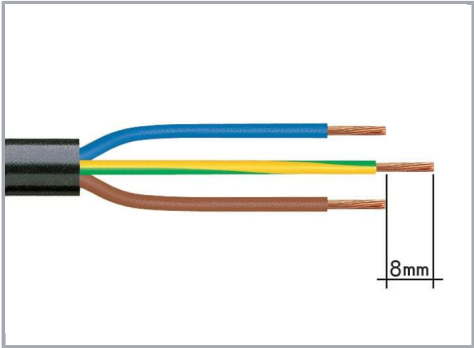
Environmental Product Compliance

Compliance Search

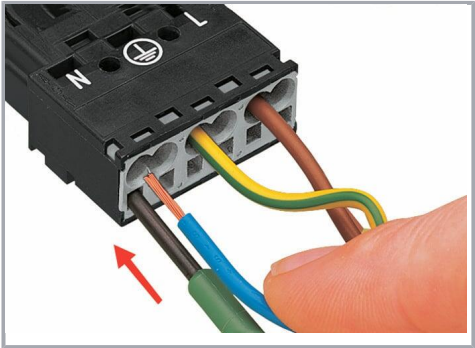
| | | |
|--|---------------------|--------------------------|
| Environmental Product Compliance 770-245 | URL | Download |
| Socket; 5-pole; Cod. B; 4,00 mm²; gray | | |

Installation Notes

Conductor termination

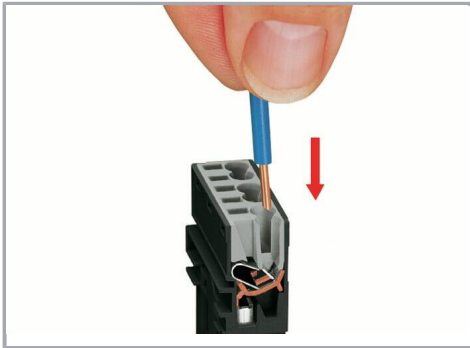


- 1. Strip length, outer insulation = 35 mm (2-pole), 55 mm (3- to 5-pole)
- 2. Strip length = 9 mm
- 3. Extended ground conductor = 8 mm

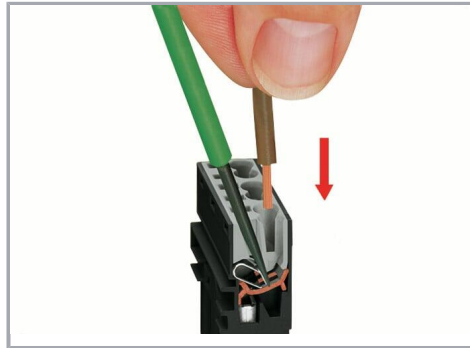


To terminate fine-stranded conductors, open the clamping unit via screwdriver (2.5 mm blade width) and insert a stripped conductor until it hits the backstop.

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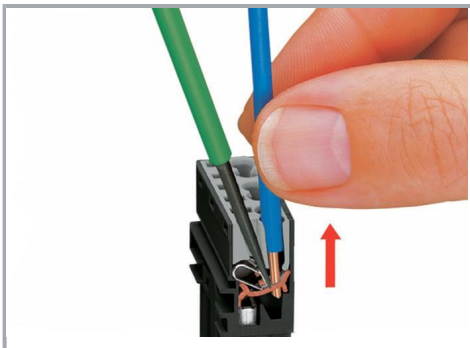


Insert the stripped solid conductor until it hits the backstop.



To terminate fine-stranded conductors, open the clamping unit via screwdriver (2.5 mm blade width) and insert a stripped conductor until it hits the backstop.

Conductor removal



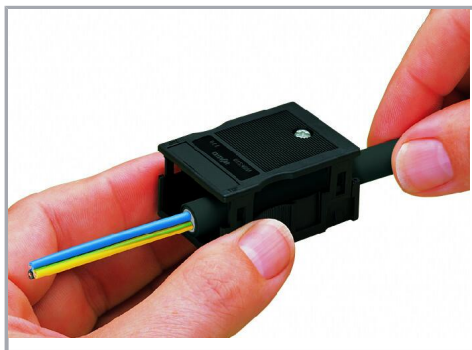
To remove the conductor, actuate the clamp via screwdriver (2.5 mm blade width) and pull out the conductor.

Installation

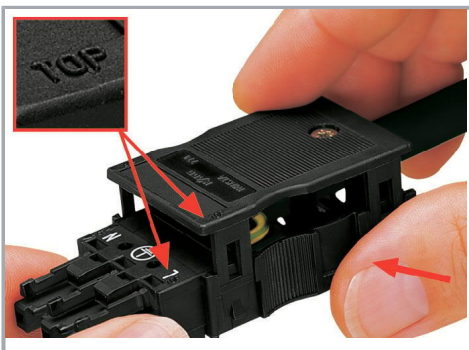
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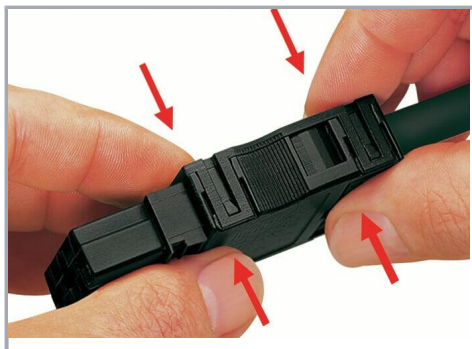
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We recommend pulling the pre-latched strain relief housing over the cable prior to termination. However, the strain relief can be mounted at a later time as well.



Latch the strain relief housing onto the plug /socket. Note the "TOP" inscription.



Prepare strain relief housing by snapping together upper and bottom part.

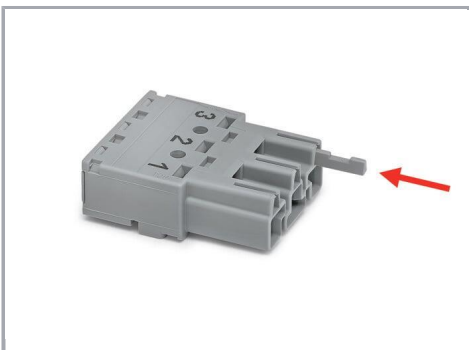


Tighten strain relief screw with screwdriver (2.5 mm blade width).

Coding



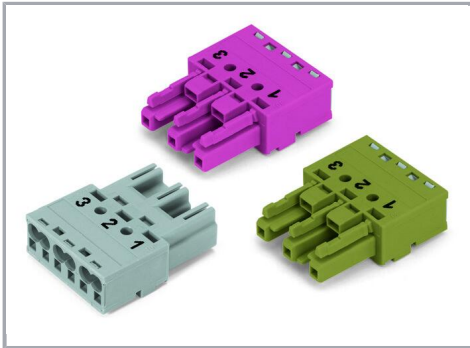
Simply cut off the coding pin from the socket.



Insert coding pin into plug (break first) until it engages.

Mismatching protection

Subject to changes. Please also observe the further product documentation!

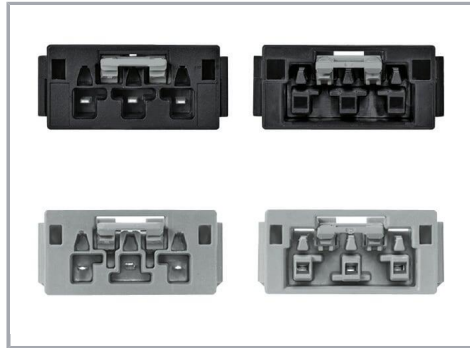


B-coded connectors with different colors can be plugged together.

Important note:

Different colors and/or pole markings are used for circuit identification.

Only connectors of the same color and same pole marking must be plugged together.



B-coded connectors (shown in gray) not only differ in color, but also in their design, making them incompatible with other coded connectors.



Easy circuit identification via different marking and colors

Product family

WINSTA® MIDI

[Show all products from the family](#)

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